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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,925	08/18/2003	Tsutomu Kume	450100-04710	3635

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EXAMINER

PRABHAKHER, PRITHAM DAVID

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/642,925	Applicant(s) KUME ET AL.	
	Examiner Pritham Prabhakher	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>05/15/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

1. In the last line of Page 20, the mentioned CPU 15 should be rewritten as the "CPU 62".

2. On Page 18, the memory controller 41 should be renumbered as 14.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 13 defines a **computer-executable program** embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed **computer-executable program** can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Hinson (US Patent No.: 7103260B1).

*With regard to **Claim 1**, Hinson teaches of an image processing apparatus (All of Figure 2) capable of outputting image data, comprising:*

reference-signal generation means for generating a first reference signal and a second reference signal serving as processing-timing references (In Figure 2, 25 generates an input clock (first reference signal) and 29 generates an output clock (second reference signal) that serves as processing-timing references);

*first acquisition means for acquiring image data (Image data is acquired through VTR 5, **Figure 1 and Column 3, Lines 44-45**);*

*generation means for processing the image data acquired by the first acquisition means, according to timing determined by the first reference signal to generate image data having a first frame rate (Block 25 in Figure 2 provides the generation means for processing the image data acquired and generates image data having a first frame rate, **Figure 2 and Column 6, Lines 1-25**);*

*conversion means for converting the image data having the first frame rate generated by the generation means to image data having a different frame rate (Blocks 2 and 29 in Figure 2 provide the conversion means for converting image data having the first frame rate to image data having a different frame rate, **Figure 2 and Column 6, Lines 36-51**);*

*first output means (15 in Figure 1) for outputting image data having a second frame rate determined by the second reference signal (output clock), converted by the conversion means, to a first another image processing apparatus (A second frame rate having a different frame rate than the first frame rate is output through the encoder 28 into a monitor, **Figures 1,2 and Column 6, Lines 1 et seq.**); and*

*second output means (16 in Figure 1) for outputting image data having a third frame rate, converted by the conversion means, to a second another image processing apparatus (Figure 1 shows a second output means (VTR). However the second output means could also be a monitor or a frame random access-store. The frame rate going into the VTR is the third frame rate, different from the first frame rate due to the conversion by the conversion means, **Figures 1,2 and Column 6, Lines 1 et seq.**).*

*Regarding **Claim 2**, Hinson teaches of an image processing apparatus according to claim 1, further comprising display means for displaying the image data having the second frame rate determined by the second reference signal, converted by the conversion means (15 in **Figure 1 and Column 6, Lines 40-42**).*

*With regard to **Claim 3**, Hinson teaches of an image processing apparatus according to claim 1, wherein the second frame rate is the frame rate of an image format processed by the first another image processing apparatus to which the image data is output by the first output means (The second frame rate is the frame rate that is of a format capable of being processed by the monitor 15 to which the image data is output by the first output means, **Figures 1,2 and Column 6, Lines 40-42**).*

*Regarding **Claim 4**, Hinson teaches of an image processing apparatus according to claim 1, wherein the third frame rate is the frame rate of an image format processed by the second another image processing apparatus to which the image data is output by the second output means (The third frame rate is the frame rate of the image format that is processed by the VTR (second image processing apparatus) to which image data is output by the second output means, **Figures 1,2 and Column 6, Lines 40-42**).*

*In regard to **Claim 5**, Hinson teaches of an image processing apparatus according to claim 1,*

*wherein the second frame rate is the frame rate of a first image format processed by the first another image processing apparatus to which the image data is output by the first output means (The second frame rate is the frame rate that is of a format capable of being processed by the monitor 15 to which the image data is output by the first output means, **Figures 1,2 and Column 6, Lines 40-42**).;*

*the third frame rate is the frame rate of a second image format processed by the second another image processing apparatus to which the image data is output by the second output means (The third frame rate is the frame rate of the image format that is processed by the VTR (second image processing apparatus) to which image data is output by the second output means, **Figures 1,2 and Column 6, Lines 40-42**).; and*

*the first frame rate is a frame rate not related to the first image format or the second image format (The first frame rate is not related to the first image format or the second image format, **Column 6, Lines 40-46**).*

*Regarding **Claim 6**, Hinson teaches of an image processing apparatus according to claim 1, wherein the second frame rate is the same as the third frame rate (The output data rates (second and third frame rates) output to the first and second outputs are the same because they both come from encoder 28, see **Figures 1 and 2**).*

*With regard to **Claim 8**, Hinson teaches of an image processing apparatus according to claim 1, wherein the first another image processing apparatus, which receives the input of the image data having the second frame rate output from the first output means (The second frame rate is the frame rate that is of a format capable of being processed by the monitor 15 to which the image data is output by the first output means, **Figures 1,2 and Column 6, Lines 40-42**), encodes the image data output from the first output means, according to a predetermined image format (The encoder 28 is used by the output to encode the image data output according to a format determined by the user (predetermined format), **Column 5, Lines 10 et seq.**).*

*In regard to **Claim 9**, Hinson teaches of an image processing apparatus according to claim 1, wherein the second another image processing apparatus, which receives the input of the image data having the third frame rate output from the second output means, displays the image data output from the second output means, according to a predetermined image format (The third frame rate is the frame rate of the image format that is processed by the VTR (second image processing apparatus) to which image data is output by the second output means, **Figures 1,2 and Column 6, Lines 40-42**. The VTR cannot display any images, but a monitor can be substituted in for a VTR and can be used to display images encoded by the encoder 28 according to a*

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*format determined by the user and applicable to the monitor, **Column 5 Lines 10 et seq. and Column 6, Lines 40-41**).*

*Regarding **Claim 10**, Hinson teaches of an image processing apparatus according to claim 1, further comprising encoding means for encoding the image data acquired by the acquisition means, by software processing at timing determined by the first reference signal (**See 25 in Figure 2**. The decoder 22 is present to decode the encoded image data acquired from the VTR 5 in Figure 1. Software processing takes place in block 25 at a timing determined by the input genclock (first reference signal)).*

*With regard to method **Claim 11**, the computer program storing **Claim 12** and the computer-executable **Claim 13**, these correspond to apparatus claim 1 and are therefore analyzed and rejected the same as previously discussed with respect to apparatus claim 1.*

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pritham Prabhakher whose telephone number is 571-270-1128. The examiner can normally be reached on M-F (7:30-5:00) Alt Friday's Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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